Statement by

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regarding
Climate Change: Understanding the Degree of the Problem – and the Nature of its Solutions

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Mr. Chairman and members of the committee, thank you for the opportunity to testify on climate change. My name is Theodore Roosevelt IV. I am the chairman of Strategies for the Global Environment, the umbrella organization of the Pew Center on Global Climate Change. I am also a co-chairman of the board of the Alliance for Climate Protection, and a member of the board of the World Resources Institute, though my statement today will primarily reflect the views of the Pew Center.

The Pew Center on Global Climate Change is a non-profit, non-partisan and independent organization dedicated to providing credible information, straight answers and innovative solutions in the effort to address global climate change.[1] In our eight years of existence, we have published almost seventy reports by experts in climate science, economics, policy and solutions, all of which have been peer-reviewed and reviewed as well by the companies with which we work.

Forty-one major companies sit on the Pew Center's Business Environmental Leadership Council, spanning a range of sectors, including oil and gas (BP, Shell), transportation (Boeing, Toyota), utilities (PG&E, Duke Energy, Entergy), high technology (IBM, Intel, HP), diversified manufacturing (GE, United Technologies), and chemicals (DuPont, Rohm and Haas). Collectively, the 41 companies represent two trillion dollars in market capitalization and three million employees. The members of the Council work with the Pew Center to educate the public on the risks, challenges and solutions to climate change.

[1] For more on the Pew Center, see www.pewclimate.org.

Mr. Chairman, global climate change is one of the most daunting challenges we have ever faced as a nation. I am not a scientist, but I respect science, and when the nation's premier science body, the National Academy of Sciences, speaks as clearly on an issue as it does on climate change, it is a good idea to listen. The National Academy of Sciences has said, in a statement signed last summer by the academies of ten other nations as well: "The scientific understanding of climate change is now sufficiently clear to justify nations taking prompt action. It is vital that all nations identify cost-effective steps that they can take now, to contribute to substantial and long-term reduction in net global greenhouse gas emissions."

What do we know about the impacts of climate change?

We know that hurricanes are becoming more intense, not just in the Atlantic, which gave us Katrina and Rita, but in all oceans where hurricanes occur. We know we are experiencing a worldwide loss of mountain glaciers, a trend that is accelerating and has major implications for water supply in this country and around the world. We know that sea level is rising at an accelarated rate. We know that ecosystems around the world are showing signs of responding to climate change, with strong scientific evidence indicating that climate change is promoting the spread of diseases to new areas. The bottom line is this: The earth is warming; the impacts—once only predictions—are now upon us and are likely to worsen; and human activity is largely to blame.

Because carbon dioxide and the other greenhouse gases stay in the atmosphere for so long – a century in the case of carbon dioxide – climate change is largely irreversible, at least in the time scales human society is used to dealing with. But that does not mean we should throw up our hands. Given the current projections, things could get bad. But if we do not act soon, they will get worse.

Beyond the environmental case, though, there is a strong business case for addressing climate change – and doing so in part through mandatory measures.

As I mentioned, the Pew Center works with a wide range of businesses. Each of the companies on our business council is acting voluntarily to reduce its greenhouse gas footprint. The voluntary actions have shown the companies there are cost effective – in some cases, cost saving – measures they can take to reduce greenhouse gas emissions. Thirty of the companies have targets for their voluntary actions, and 14 have already met their targets.

To give you some examples:

- Entergy last year met its first goal to stabilize CO_2 emissions at 2000 levels, and is now aiming for a 20 percent reduction in emissions by 2010.

- Weyerhaeuser will reduce its emissions 40 percent by 2020 through greater reliance on biomass to fuel its pulp and paper mills.

- SC Johnson reduced GHGs 18 percent since 2000, more than doubling initial 8 percent reduction goal, by vastly reducing reliance on fossil fuels and increasing use of alternative forms of energy, like landfill gas and wind.

Why are the companies doing this? In absence of serious climate policy in this country, why are they focused on this issue at all? Among other things, many in the business community realize that the risks of inaction outweigh the costs of action. For example, according to the reinsurance company, Swiss Re, there were $45 billion in total insured losses from Katrina, and $10 billion in insured losses from Rita and Wilma. While we can not say that any one hurricane is the result of climate change, there is strong evidence that we have and will be seeing more intense hurricanes, and these numbers illustrate the cost of that.

Perhaps because it is so exposed to the risks of climate change, the insurance industry has emerged as one of the strongest leaders in addressing the issue. For example:

- The National Association of Insurance Commissioners formed a task force this year to assess the impacts of climate change on the industry.

- Lloyd's of London published "Climate Change: Adapt or Bust," saying insurers must now take climate risks far more seriously.

- Marsh, Inc., which has just joined our business council, has committed to be a leading source of climate risk information and solutions. A Marsh white paper on corporate climate risk concluding that "Climate change is a significant global risk. Businesses – if they haven't already – must begin to account for it in their strategic and operational planning."

So businesses have a significant interest in climate action.

There is a limit, however, to how far even the bravest corporate leader can go voluntarily. If you expect mandatory climate policy to be enacted within the lifecycle of your capital investments – as most astute businesses managers do – voluntary action today could actually end up hurting you in competition with the laggards in your industry when the policy becomes mandatory.

More importantly, for investors and inventors to start working in earnest on the transformative technologies the world will need to keep growing the economy while shrinking our climate change footprint, they need the certainty that only mandatory policy can provide.

We have a tremendous track record in this country when it comes to meeting environmental challenges, even as we grow our economy. Of the many important lessons

we can draw from that experience, here is one especially to keep in mind: No major environmental problem has ever been solved in this country by voluntarism alone.

I have been discussing this in somewhat negative terms, but this is not just an issue in which we must manage risk, it is also an issue that yields business opportunities. That is one reason technology giants like GE, DuPont, United Technologies and the others on our council are working on this issue. The challenge of climate change, like other challenges we have met in the past, will create economic opportunities for U.S. industry. Eighty percent of our greenhouse gas emissions come from the burning of fossil fuels. Because of this, addressing climate change will involve, among other things, increasing the efficiency of our energy use. That increased efficiency will directly improve U.S. competitiveness, as well as increase our energy security by reducing reliance on foreign energy sources.

Furthermore, financiers are projecting significant growth in demand for renewable energy technologies and energy efficient products. Mandatory climate policy will spur U.S. leadership in environmental and energy technology innovation, assuring U.S. competitiveness in the booming global market for climate-friendly technology.

Again, a few examples:

- BP has created an Alternative Energy Division and may invest up to $8 billion in this venture over the next 10 years.

- The 2005 revenues of GE's *ecomagination* initiative are over $10 billion, up from $6.2 billion in 2004.

- Clean technology markets now represent annual global revenues greater than $150 billion.

- U.S. venture capitalists poured $1.4 billion in clean technology markets in 2005, up 43% from the year before.

- When the Carbon Disclosure Project was launched in 2003, 35 investors totaling $4.5 trillion in assets signed on. This year, 155 institutional investors with combined assets of $21 trillion signed on. Currently, more than 350 companies report their emissions and climate strategies through the CDP website.

There are also growing opportunities in the carbon trading market. Many of the companies on our business council have experience with the European Union's emissions trading system, and others participate in the Chicago Climate Exchange. In particular:

- Baxter International became first company to transfer greenhouse gas allowances from the European Union to the Chicago Climate Exchange, linking the two markets and setting an important precedent.

- PG&E has a Climate Protection Program that gives customers the opportunity to go "carbon neutral" by paying a small fee on utility bill to offset carbon emissions associated with electricity purchases.

How do we make this outstanding work the norm? In February, the Pew Center released the first comprehensive plan to reduce greenhouse gas emissions in the United States. Our Agenda for Climate Action outlines an ambitious yet practical approach, based on eight years of analysis and work with leading businesses and policymakers.

The Pew Center's Agenda outlines 15 specific recommendations in six overarching areas where the United States must take action. These six areas are: 1) science and technology; 2) market-based programs; 3) sectoral emissions; 4) energy production and use; 5) adaptation; and 6) international engagement. Let me say a word about a few of these.

First, we believe it is critically important to enact a mandatory cap and trade program that applies to large stationary sources – power-plants and major manufacturing facilities. Our work over the years has shown that market mechanisms such as emissions trading allow companies to reduce emissions in the cheapest, most efficient manner possible.

What a cap and trade system does is tell the market there is value in reducing emissions. It tells inventors and investors there is profit in creating and deploying climate-friendly technologies. It creates an essential pull for new technologies to enter the market. The push for those technologies comes from the funding of innovation, but we need both the push and the pull to achieve real and cost-effective results.

A cap-and-trade system by itself, however, and particularly at the level that would be politically practical, is not enough. This is why the Pew Center's Agenda also calls for sectoral approaches, such as transforming the much-maligned Corporate Average Fuel Efficiency (or CAFE) program. We recommend strengthening and converting the CAFE program to a set of tradable standards based on greenhouse gas emissions. If you are looking to protect the climate, focusing on emissions rather than fuel efficiency is the way to go. By creating a market for emissions reductions through trading, and at the same time supporting the development of low-emission vehicles and fuels (the push and pull approach)—you can reduce the cost of getting the job done.

Another critical issue is coal. We need to be realists here. Coal is responsible for 50 percent of our nation's electricity. It is cheap and it is plentiful and I believe it will continue to play a role in meeting U.S. and global energy needs for years to come. We need, therefore, to get very serious about reducing carbon dioxide emissions from coal-fired power plants. First, we need to build the very best, most efficient coal burning power plants possible to reduce emissions per kilowatt-hour of electricity. And then we have to prove that the carbon dioxide that still is emitted from these plants can be captured and stored in geological formations where it can be kept from entering the atmosphere for centuries or millennia.

We recommend an aggressive program of research, development and demonstration for these technologies. A few random demonstration projects done at a leisurely pace clearly are not enough. We need to build the most efficient plants and we need a concerted public-private effort to demonstrate that capture and sequestration can work, and then we have to insist that it be done.

Again, these are not the only issues that need to be addressed. Energy efficiency, renewable energy, carbon sequestration on agricultural and forest lands – all these are essential parts of the solution as well.

Finally, the Pew Center's Agenda, while primarily focused on domestic actions, also calls for greater U.S. participation in international negotiations on this issue. It is obvious now that there is no chance the United States will sign on to the Kyoto Protocol. Regardless, the fact remains that climate change is a global problem that demands a long-term global solution. We need to engage every country that is a major source of these emissions, not just the United States, but China and India as well. And we need to come up with ways to make the process fair and equitable for all involved.

In closing: climate change is a serious challenge and one we need to begin addressing now in a serious way, including through mandatory policy. Fortunately, there is every indication that if we design our policy right, we will be not just allowing, but helping, the economy to grow. I thank and commend you, Mr. Chairman, for holding this hearing. The Pew Center looks forward to working with the committee on the development of any future climate policy.